

Claims

[c1] What is claimed is:

1. An optical recording system for burning an optical disc, the optical recording system comprising:

- a housing;
- a laser pickup installed inside the housing for writing data onto the optical disc according to a write strategy and reading an RF signal from the optical disc;
- a laser drive installed inside the housing connected to the laser pickup for controlling operations of the laser pickup;
- a read channel installed inside the housing connected to the laser pickup for processing the RF signal received by the laser pickup;
- a jitter meter installed inside the housing connected to the read channel for generating delay signals according to the processed RF signal; and
- a digital signal processor installed inside the housing connected to the laser drive and the jitter meter for receiving the delay signals, configuring the write strategy according to the delay signals, and controlling the laser drive to control the laser pickup to write data onto the optical disc according to the configured write strategy.

- [c2] 2.The optical recording system of claim 1 wherein the jitter meter comprises:
a delay chain comprising a plurality of delay cells connected in a cascade manner, each delay cell delaying an input signal a time unit;
a buffer set connected to the delay chain for storing a delay signal received from the delay chain; and
a control unit connected to the read channel and the buffer set for outputting a control signal according to a standard clock and the processed RF signal.
- [c3] 3.The optical recording system of claim 2 wherein the buffer set comprises a plurality of buffers each connected to a delay cell for receiving a delay bit of the delay signal transmitted from the delay cell.
- [c4] 4.The optical recording system of claim 2 wherein each of the delay cells is a flip-flop.
- [c5] 5.The optical recording system of claim 4 wherein the flip-flop is either rising-edge triggered or falling-edge triggered.
- [c6] 6.The optical recording system of claim 1 wherein the optical disc comprises a lead-in area, the processed RF signal sent to the jitter meter being generated from an RF signal read from the lead-in area of the optical disc.

- [c7] 7.The optical recording system of claim 1 further comprising firmware for storing parameters and arithmetic formula.
- [c8] 8.A method for burning an optical disc in an optical recording system comprising following steps:
(a)writing data onto the optical disc according to a write strategy and reading an RF signal from the optical disc;
(b)processing the RF signal;
(c)generating delay signals according to the processed RF signal; and
(d)configuring the write strategy according to the delay signals.
- [c9] 9.The method of claim 8 wherein step (c) comprises:
delaying the processed RF signal;
outputting a control signal according to a standard clock and the processed RF signal; and
generating a delay signal according to the control signal and the delayed RF signals.
- [c10] 10.The method of claim 9 wherein the delay signal is formed by a plurality of delay bits.
- [c11] 11.The method of claim 8 wherein the RF signal is read from a lead-in area of the optical disc.

[c12] 12. The method of claim 8 wherein the write strategy in step (d) is configured according to parameters and arithmetic formula.